

# Bingham's Production Soon to Reach Enormous Total

## WHAT BINGHAM IS DOING.

Miners employed	2,550
Mechanics	300
Tradesmen	150
On railroad construction	200
Teaming	200
Laborers	100
<b>Total</b>	<b>4,000</b>
Wages per month at \$3.00 per day, \$18.00	
Daily ore production of 4,000 tons, estimated at \$18 per ton, is \$72,000	
per month or, per year, \$1,680,000	

The figures quoted above give but the faintest kind of an idea of what is doing these days in the famous old camp of Bingham, the home of Utah's bonanza copper mines. Excepting, of course, the Cactus of the Newhouse Mines & Smelters corporation in Beaver county, the Columbus Consolidated and the Dixie mines of the Utah & Eastern company in Washington county, Bingham is today the biggest camp in the state, and it is only just getting started. As much or more money is going into machinery, buildings and equipment as is represented in the payrolls, and on that account the camp's real dividend career has not yet opened. Within another year the Utah Copper and Boston Consolidated companies will be out of the woods with their "construction and betterment" accounts, and then these mines will begin pouring money into the laps of the shareholders at a rate that will fully compensate for the vast expenditures now being made. What is true of the companies named is also true of the Tintic Mining & Development company, owner of the Yampa mines and smelters. It applies with equal force to the Ohio, Bingham Consolidated, Utah-Apex and a whole lot of other properties.

## Work Retarded by Prosperity.

While the year in the camp has been an unusually prosperous one, lack of labor, lack of transportation facilities and a subordination of development to vigorous campaigns of production have materially held back production of the low-grade porphyry ores has not commenced on an extensive scale as yet, nor can this develop until the great milling plants of the Boston Consolidated and Utah Copper companies have been completed and placed in commission. It will be necessary, also, for the Rio Grande Western railroad to finish the many miles of track to the properties and from there to the mills and smelters before a tonnage such as is contemplated can be handled. No expense has been spared to get all in readiness for the campaign ahead, but Bingham has been no different to other sections of the west, and the great corporations have found, for the first time in their existence, that there are many things which money could not buy. All through the summer and fall months there was not a day when there was not work for many more men than could be found; there was not a day when the big companies would not have given almost anything for more men, when they needed men for more work, when they were waiting for material and supplies of one kind and another. In the face of it all they have done the best they could and, everything considered, wonders have been accomplished.

## Mountains Torn Down.

Mountains have been literally torn down by the Boston Consolidated company. Millions of tons of overburden have been removed from the underlying billions of tons of copper-bearing porphyry ore and this work is progressing all the time, in good weather and bad, with the aid of numerous trains of cars and huge steam shovels. With these devices the entire mountain side is being cut down to a depth varying anywhere from twenty to fifty or more feet, and the material thus cut away is moved back a mile or so and dumped into the canyon. The great work has been scored out of the non-mineral-bearing quartzite, where it can rest forever without being in the way.

Where these gulches are being filled up and level planes have been made the company has been erecting great boarding and lodging houses for its men; machine shops, power plants, etc., have been installed and every provision has been made for the day when the hauling away of the porphyry ore shall begin. No one can understand what this work means without seeing it done. To see a puffing locomotive come dancing around a point of the mountain and pull up alongside of a mammoth steam shovel to see the great arm of such a machine swing a steel-

toothed bucket into place, plunge forward and dig from five to seven tons of rock and dirt out of the mountain-side, lift it, swing and dump it into one of the waiting cars in less than a minute, is a sight worth seeing. In this way a train of ten cars, holding 100 tons, is loaded in five or six minutes, and the train pulls out, to be immediately followed by another string of empties. This process is being carried on day and night with two big shovels and their complement of men and trains, and it will continue for many months to come. Nothing like it has ever been in the history of mining camps before. The introduction of the method was a master stroke, originated by master minds in the mining world.

## Utah Copper Company.

A thousand feet below the Utah Copper company has employed the same methods to strip the overburden from its deposits of copper porphyry, so that by and by this company, also, will be doing all its mining in this class of copper ore on precisely the same lines as those inaugurated at the Boston Consolidated. In the meantime it has miles and miles of underground workings from which any tonnage desired can be sent to its milling plants, one of which is located in close proximity to the mines, and the other, like that of the Boston Consolidated plant, near the great copper smelters at Garfield. The Bingham mill of this company has been used largely as an experimental plant, notwithstanding its capacity of 600 tons or more of ore per day. It is now being partially remodelled and enlarged so that it will treat not less than 1,000 tons a day. Later it may be increased to an even greater capacity than that. It is necessary to speak here of the great tonnages of ore exposed in such mines as the Utah Copper and Boston Consolidated. Fifth properties will be running 100 years from now if copper is still being consumed, and that is long enough to figure upon by living mortals of today.

## Utah Con. Beats World.

The Utah Consolidated has become such a staid old producer and dividend-payer that the public does not look for anything new from it. It may be said in passing, however, that it has the largest and richest body of copper-gold ore to be found in the camp today. It is so big that the management dare not open up for more than two or three years ahead on account of the danger that such a proceeding would entail under the system of mining employed, the "caving" system. This company makes copper cheaper than any operating company in the United States. This is due to more than one

cause. First, the management has introduced a very inexpensive system of mining. Second, the ores carry such a large percentage of sulphur that very little other fuel is required to smelt the ore. Third, it has a management that knows how to make the cents count. Fourth, it operates its own smelters and markets its own product without having to pay a string of commissions to middlemen and brokers. Utah Consolidated is one of the cleanest-cut mining and smelting propositions in the country, or the world, for that matter. This is shown in its reports; it is emphasized in its treasury reserves and the rate of dividends it pays.

## Heinze's Entry Into Camp.

F. A. Heinze's entry into Bingham has been one of the events of the year. Recognizing what the man had done in the camp of Butte, the information that he had become a factor in the Bingham Consolidated company caused all kinds of rejoicing at camp and in Salt Lake as well. A few weeks ago, when he secured control of the Ohio for his United Copper company, the fact that he intended to become more and more identified with Utah mining was made strikingly apparent, particularly as he had previously permitted his name to go on the board of directors of the Western Utah Copper company, the owner of valuable properties in the Deep Creek country.

No sooner had Mr. Heinze announced his purchase of Ohio than it was decided to equip the mine with great hoisting works and a milling plant of not less than 2,000 tons daily capacity. It was also promised that the new mill should be in operation by the end of next November. Much has been said during the past six months concerning the value of the Ohio company's territory and, until the announcement that a 2,000-ton mill was to be erected to handle the product, and that the Heinze engineers had said that a plant of such capacity was required, there was some doubt as to the sincerity of the conditions had been stretched a little. Everybody knows better now. It is realized that a man like Heinze does not go into a proposition for the sake of having it said that he is spending money. He is willing, evidently, to spend it, but, like all good business men, he insists on knowing that he is getting value received. It will cost him about \$2,000,000 for the Ohio and its equipment. There had to be something in the mine to persuade him to spend that much money.

## Yampa and Men Who Made It.

One of the sad features of the year's history of Bingham was the chronicling of the death of George H. Robinson, the

founder of the Tintic Mining & Development company, owner of the Yampa mines and smelter. Mr. Robinson, with Captain Henry Stern, of New York, had labored zealously and long to bring the company's Bingham properties up to the splendid stage of production they now occupy and, just as the proposition was placed on its feet and when it would have been possible for Mr. Robinson to have commenced the enjoyment of the fruits of his labor, he was called to his long home.

And right here it is necessary to give another man full credit for the part he played in the affairs of the Yampa company. That man is James W. Neill. During his career as manager of the property the system by which the mine was so splendidly opened was inaugurated and when the time arrived to equip the property with a smelter, he it was who insisted that the works should be erected near the mine rather than in the Salt Lake valley. It was repeatedly declared that, notwithstanding his insistence, the smelter would be located on the banks of the Jordan river, in close proximity to the plants that are now under the ban of the courts, and which will, most likely, have to cease business and move to points where less damage to vegetation will result from their operations. Mr. Neill was able to see what was coming and he urged his opinions so strongly that it was finally decided to build the smelter in the canyon, where the fumes could do no harm. Those who berated him at that time are now at least forced to see that his judgment was not at fault, whether they are brave enough to publicly admit it or not.

The Yampa mines and smelters are now in shape to handle approximately 600 tons of ore per day, and, as the winter season is drawing up, they are the best in the camp, the future of the proposition is assured and great sums of money must be poured into the pockets of the shareholders of the company.

## Bingham Con. Affairs.

The mines of the Bingham Consolidated company have been responding splendidly during the year, and a tremendous amount of development work has been performed, while most of the ore that has been going through the company's smelters has come from its own Bingham and Tintic mines. During the fall, after Mr. Heinze became managing director of the company, it was decided to greatly enlarge and remodel the smelting works, this with a view of being not only better able to handle the ores from the company's own mines, but to be able to handle the company's custom smelting business.

To what extent these improvements will now be pushed is hard to say. It is probable, however, that the few months' respite which the appeal of the smelter smoke stacks has afforded the company, will be utilized in an extra effort to so control the smoke and fumes from the plant that the objections of the court can be overcome and the operation of the plant continued unimpeded for many years to come. Smelter Expert H. L. Charles is working industriously to solve the problem. His success will mean everything to his company and the smelting industry.

## Colonel Wall's Starless.

Something over a year ago Colonel E. A. Wall purchased the Starless group of claims, adjoining the Utah Copper company's properties, and began the systematic opening of the ground. During the year just closed he has equipped the mines with a large compressor plant and everything necessary to carrying on the work on an extensive scale when the proper time arrives. Between 5,000 and 6,000 feet of work has now been done in the mines, and, while some of this work, done in the days before he acquired possession, has been without substantial result, there has been some important disclosures made in the mine that lends encouragement to the belief on the part of Colonel Wall that a big and rich producer of copper can be made of the property. Recent developments have been particularly assuring, but they have not been pushed to a point where the owner is willing to disclose them in print. It is safe to say, however, that during the coming spring he will begin handling ore from the property in his Bingham canyon mill and, should the next twelve months' developments meet expectations, there is no doubt but what the mines will be equipped with a large individual milling plant.

## Utah-Apex Campaign.

The Utah-Apex campaign has carried on a vigorous campaign during the year and results have been exceedingly satisfactory to the management. The developed ore bodies in this property show heavy percentages of iron with twinning values in lead, silver and gold, together with a little copper. A long, deep tunnel is being driven on this property and the belief is that it will open up great bodies of ore of better value than those found here. Results are already being met with in the lower or Peruvian tunnel and, in order to handle the increased tonnage that these workings are counted upon to supply, the company is already building a tramway and providing, through an auxiliary company, ample milling facilities.

The Utah-Apex company has spent its money with a determination to make a great mine. It is entitled to succeed, even beyond its most sanguine expectations.

Much the same combination that controls the Utah-Apex has other big groups of claims to the north and northeast of that property, and there is a prospect that substantial results will be attained there one of these days. At any rate, those behind the undertakings have evinced a willingness to spend their money and take the chance, and that is the kind of work that results in the making of mines.

## Bingham-New Haven a Wonder.

The Bingham-New Haven is one of the wonders of the Bingham camp. Two years or so ago the proposition was taken hold of by C. H. Doolittle for the company that had been previously formed to operate the ground. In the twenty-four months, without calling on the management to the necessity of selling treasury stock, he has equipped the mine with splendid buildings, including numerous cottages for employees, put in heavy machinery, a long aerial tramway, loading blips and spur tracks from the Rio Grande railroad, has run a long new tunnel and opened up the upper portion of the mine in a marvelous fashion, all with the ore taken out. More than that, he has made it possible for the company to enter the dividend list, make its initial payment and give the treasury a reserve, in addition, of more than \$100,000. There is no question but what the company will pay regularly every quarter from now on, and Manager Doolittle promises that during the year he will be able to give big news concerning mine conditions as they will develop in the new lower tunnel, designed to open the ore bodies for more than 700 feet on their dip below the present deepest workings of the mine.

## Bingham-Mary and Phoenix.

The Bingham-Mary company commenced development work early in the year and, after building a long piece of road from the main canyon road and getting a working shaft started, machinery was placed and the active opening of the mine was commenced. Good ore was encountered at a short distance below the surface, and now the company is developing the ledge on the 300-foot level, while the shaft is being sent to greater depths. Prospects for the making of a good mine in this ground are considered of the best. It is held by a strong company and very recently its shares have been commanding a good price in the eastern market.

Adjoining the Bingham-Mary on the east is the property of the Phoenix company. It has been steadily producing throughout the year, and it is said that large quantities of shipping and milling ore are now blocked out in the mine. There has been talk of the Bingham-Mary company claiming apex to the ore bodies of the Phoenix, but well-posted engineers of the camp place but little stock in these reports, contending that the Phoenix has the ledge in its own ground, as well as has the Bingham-Mary. The ledge, it is claimed, runs into the Phoenix on its strike, or course, and not on its dip.

## A Bunch of Good Ones.

A bunch of properties nestled together in the favorable location in the camp are the New England, Bingham Standard and Bingham Central companies' mines. There has been considerable talk lately about a consolidation of the New England and Bingham Standard. It will not be altogether surprising to see them come together of these days, while the event may take place before this paper finds its way into the world. The Bingham Standard has a magnificent block of ground and the New England company is equipped to take care of the ore that has been opened in it at great depth from the latter's workings. However, both are able to maintain themselves separately and become prominent in making the history of the camp.

The Bingham Central company has been steadily at work during the year, crowding development and, while no startling disclosures have yet been made, it is considered that work is all that is necessary to bring the property to the front.

The Last Chance is another property that is beginning to attract attention. It belongs to the Nevada-Utah company and has been producing for several months. It is one of the old mines, reclaimed, and the management considers that its best years are ahead of it.

## Fortuna and Some Others.

The Fortuna company owns a fine group of producing mines adjoining the Ohio Copper. From fifty to 100 tons of ore a day has been coming from the property during the year and, now that a big compressor has been installed and started up on the long tunnel level, the management will put in hard licks at obtaining still greater depths.

The Silver Shield and United Bingham properties continue to develop with satisfactory results, and the impression prevails that they will yet make a point in the district. Both have ore bodies and both are being developed with a purpose of making real mines of them.

At the Copper Glance company's properties a lively campaign of development is being carried on, the Montezuma is opened up, and there are a number of other fine prospects in the camp, particularly on the west end and south side, that give promise of turning out well.

There has also been some good work done in the northern fifty of the Bingham district, and this end is expected to become prominent some day, as it is the opinion of men of judgment and experience that the wonderful ledges outcropping in that direction are not barren of the metals that have made the main portion of the district famous.

## Something About the Town.

In this brief review of the year in the Bingham camp nothing has been said of the wonderful business growth of the town, nor of the prosperity of its merchants. Owing to the narrowness of the canyons of the camp the town is not and never can be much of a city. It is a regular stringtown, reaching from the mouth of the main canyon for three miles or more into the mountains, branching out into each gulch as it is met in the ascent from the valley. A tremendous amount of business is done there, notwithstanding the fact that it is within sixteen miles of Salt Lake. There is talk now of building another town out on the flat, at the mouth of the canyon, where the main yards of the Rio Grande railroad will be located, where the ore trains for Garfield and other smelters will be made up and where all freight designed for the mines and the upper portion of the old Bingham town, will be switched around for proper handling.

When the new milling plants are all in full operation and the mines of the camp are sending out from 15,000 to 20,000 tons of all classes of ore per day, as it soon will be, Bingham will be about the liveliest camp in this country. It will take Elv some time to equal it.

# SALT LAKERS OPENING COPPER VEINS OF YERINGTON

Another rich copper-bearing district is ready to boom.

It surrounds a pretty little town in the fine agricultural section of Mason valley, Lyon county, Nevada. The mines are located on each side of this valley, which affords direct railroad connection with the outside world, water for smelting, milling and power purposes, and supplies farm and stock products enough to meet the needs of a great population.

No other portion of Nevada offers such ideal conditions under which to mine, and Ely, even, will be pressed to the limit to hold the edge on it as a producer of copper and gold. For the coming five years Yerington will lead Ely; after that it will be a question of tonnage treated and, owing to the higher grade of the Yerington ores, Ely will then have to go some to overtake the lead. The possibilities of Ely are not hard to figure out; the possibilities of Yerington are yet to be determined. It is sufficiently developed to make it certain that its mines are going to be big and rich; it is likely to turn out many times larger than its most enthusiastic advocates dare claim.

## Ideal Conditions for Mining.

To a depth of 100 to 300 feet the Yerington ores are carbonates and oxides of great value. As water level is approached the sulphides appear, and these, too, so far as development has progressed, give every evidence of wonderful strength and more than usual richness. It is a district that appeals to the copper mining expert; it is one that cannot fail to appeal to the investor, as it offers him the chance of opening mines, treating the ore and reaching the market with his product at a minimum of cost and without having to battle with and overcome the disadvantages of an isolated and inhospitable desert.

Salt Lake and Utah mining operators were quick to see the advantages of

the Yerington country, and they were not slow to invest their money in it. California is also well represented, while Montana and eastern talent has managed to get in and cover some of the numerous good things the section has to offer. So far as known the Yerington ores are not in there yet; but they will never fear for they cannot afford to pass up such valuable opportunities as the country offers.

## Great Is Nevada-Douglas.

Some notion of what is being done in the district and the character of deposits that are being opened up is to be had from reports of conditions at the Nevada-Douglas, a proposition that is backed by such heavy local operators as J. D. Wood, Frank J. Hagbarth and W. C. Orem. Development in this property is proving that the company's locations cover a veritable mountain of copper ore. There has never been a hole sunk nor a tunnel started that did not, almost immediately, break into ore. Active, systematic work has been progressing less than a year, but in that time, according to reports of competent engineers, the company has exposed more than 100,000 tons of smelting ore that will average approximately 7 per cent copper. In addition, over 1,000,000 tons of milling ore that will average about 3 per cent copper, has been opened up. That this tonnage, which represents a net worth of \$15,000,000 in value, will be doubled or trebled during the next twelve months, there is not a shadow of doubt.

## New Undertaking.

Right alongside this mine W. Mont Perry and a number of other big Utah operators, joined by Michigan, California and Arizona talent, have incorporated the Yerington Central Copper company, to operate a great block of ground which promises to develop into one of the great bonanzas of the district. Besides being flanked by the Douglas, this company's ground end

lines on the Ludwig and carries the same contact from which that company is shipping regularly to San Francisco 100 tons of 25 per cent copper ore daily. A triple-compartment operating shaft is now being sunk on this ground and the intention of the management is to send it down for 600 feet, at least, without stopping.

## Mason Valley Company.

The Mason Valley Copper company, which undertook the development of the Spragg mines about two years ago, has now made a showing that guarantees one of the biggest mines of the country, and it is expected that the proposition, the control of which has been placed with George E. Gunn, will be brought out as one of the prizes of the district between now and spring, and that the proposition will be made to pay handsomely there is no doubt. Willard F. Snyder and the National Development company have a most valuable property in the Malachite group. Development is progressing all the time, and one of these days the property is going to be heard from in no uncertain manner. Even now there is talk of a great combination of interests in this portion of the camp, and it will not be surprising if something of the kind happens during the coming twelve months. This is where the hand of the Guggenheims is likely to make its presence felt, if that company believes that this camp, because it is here that a great cluster of top-notch properties lie on to each other.

The Yerington Ironsides is another proposition controlled by Salt Lake talent that is coming the year and, and there are probably a dozen more in which local capital is interested.

## Ores Can Be Treated Cheaply.

It is claimed by engineers who have made a study of the country that milling and smelting can be carried on in this section and that copper can be

of the best in the district in which it is located. Arrangements are now being perfected for its equipment with heavy machinery and all facilities for a heavy and telling campaign. In addition to the mines this company also owns valuable water rights, millsites, etc., on the Walker river, and there is reason to believe that this company will build mills and smelters of its own during the coming year.

## Other Big Operators at Work.

The Yerington Copper company, of which C. N. Strevel is president and C. D. Rookledge secretary and treasurer, is also developing a magnificent property in the Yerington country. Ore is being taken out all the time that runs from 5 to 30 per cent copper. Shipments of the ore are being made up, and that the proposition will be made to pay handsomely there is no doubt.

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produced as cheaply as in any district of the United States. All of the elements of flux necessary to cheap smelting are found in the mines and, as transportation and power are both to be had at little cost, it will not take long to provide for the making of copper-gold bullion on a large scale. Electric power is being supplied to the district by a powerful company at the present time, and most of the mines are so located that aerial tramways and even broad-gauge railroads can be utilized for transportation purposes between the mines and loading plants. Captain J. R. DeLamar is successfully operating and treating the ores of his Bluestone property, in which it is claimed more than 1,000,000 tons of 3 per cent copper ore is now blocked out in already claimed mining property. Representatives of Senator W. A. Clark, of Montana, are making a wonderfully rich mine of the McConnell property, and that it will soon be adding largely to the camp's output is considered certain.

## Compared With Other Camps.

In one of his characteristic "shake-em-up" stories, J. Fitz McCarthy, "Fitz-Mack," had a great many good things to say of the Yerington region in a letter to a Reno paper. From that story the following paragraphs, comparing the district with other Nevada camps, are taken:

"Barring Ely—always barring Ely, which is the greatest copper camp on earth—Yerington today has more mineral wealth in sight than all the other mining camps of Nevada lumped together.

Now all the rest of the country is howling for Goldfield, and those honest pioneers don't have a thing to do from morning till night but just rake in the money.

"Yes, Tonopah is all right and so is Goldfield. Great camps. Sure to return 20 for 1 on every dollar that has gone to their development. I am not knocking Tonopah nor Goldfield, but in my humble and imperfect judgment Bullfrog is destined within a few years to have both of them skinned a mile.

"There is a great wealth of ore in sight already in those three camps, beyond the shadow of a doubt. I don't desire to knock a nickle off the highest estimates ever made of their riches by any sane man who is a half-way competent judge of mining properties, but I beg leave to state modestly and calmly, for the benefit of whom it may concern, as a judgment from which the last red corpse of enthusiasm has been wrung and from which the most untimely and gaudy rag of exaggeration has been stripped, that there is a single mine in the Yerington copper field that has today practically in sight

a considerably greater sum of mineral wealth, reckoned at the present price of copper, than Tonopah, Goldfield and Bullfrog all lumped together, can show.

"And that is only one of Yerington's mines."

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